

# 6. Presentations and Discussion: ADA Compliance and Universal Design Considerations

**Martin DuPont**

ADA Specialist, City of Tucson

**Sherry Santee**

Physical Therapist, UA Disability Resources Center



# What Is the American with Disabilities Act (ADA)

*The Americans with Disabilities Act of 1990 (ADA) prohibits discrimination and ensures equal opportunity for persons with disabilities in employment, State and local government services, public accommodations, commercial facilities, and transportation*

- Why ADA and Universal Design is important for Broadway

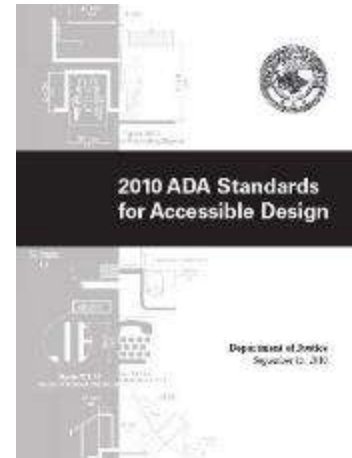
# How does ADA Apply to Streets

- Designed to Serve all Users
- Pedestrian Facility Design
  - Architectural Barriers Act (ABA) of 1968
  - Rehabilitation Act of 1973 (Section 504)
  - American with Disabilities Act of 1990
- Communications & Information Access



# How ADA is Enforced

- Design Standards
  - Includes Proposed standards for Pedestrian Facilities in Public Right-of-Way



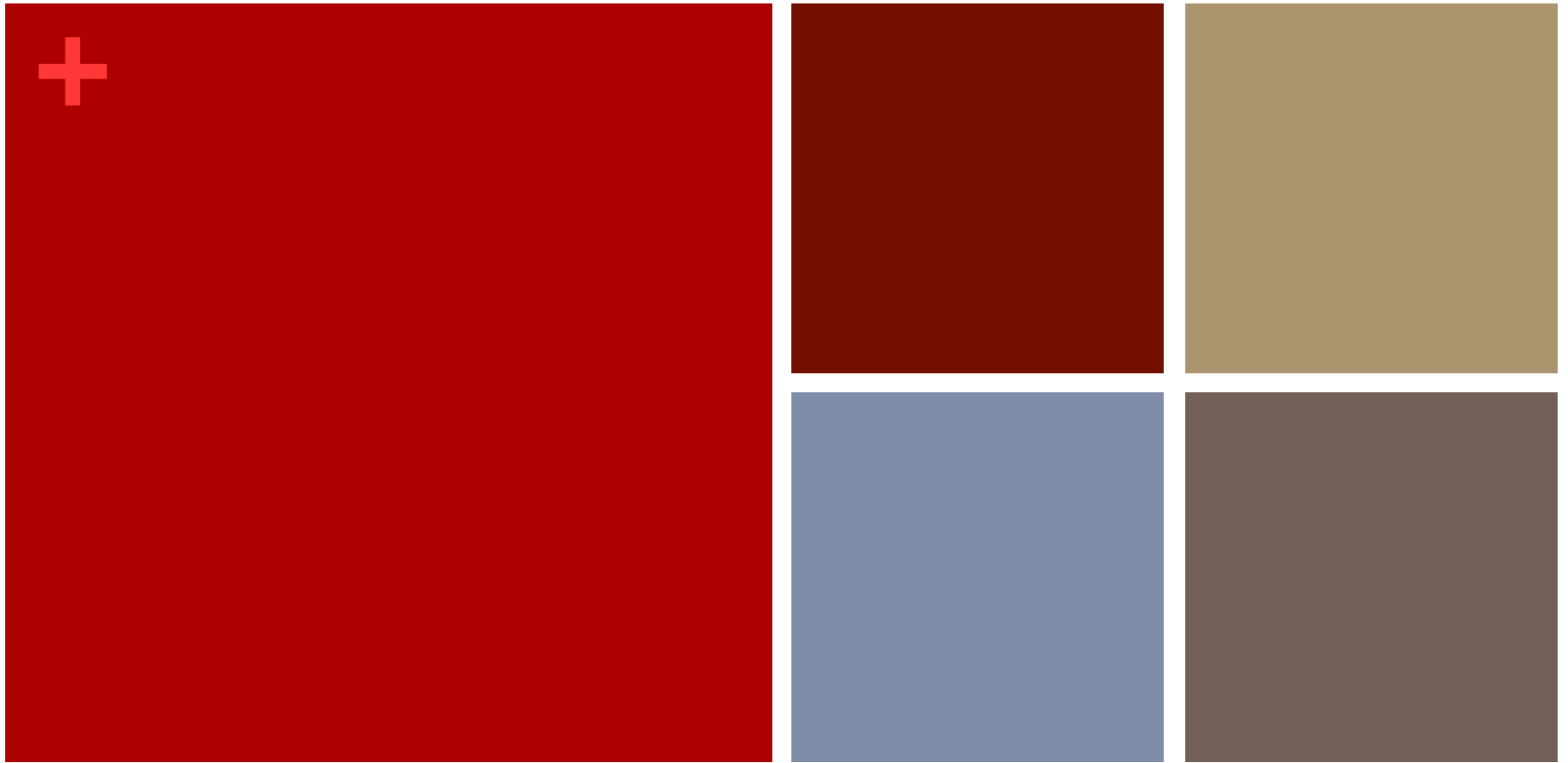
- Department of Justice Audit



# DOJ Settlement Agreement with City of Tucson

- Project Civic Access
- Notice: November 2004
- Audit: January 2005
- Settlement Agreement: July 2005
- 4-Year Agreement
  - First 3-years spent making corrections
  - Final year spent monitoring





“Reframing”  
Disability &  
Universal Design



# Emerging Frame



The environment creates and perpetuates barriers that disable or exclude people with impairments.



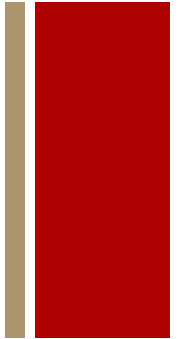
# Universal Design

The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

Our responsibility	Impact
<ul style="list-style-type: none"><li>• Identify and remove barriers to access</li><li>• Incorporate access into design initially</li></ul>	<ul style="list-style-type: none"><li>• Inclusive and welcoming environments</li><li>• Sustainable design</li><li>• Equitable, respectful experience for all</li></ul>



# + Principles of UD



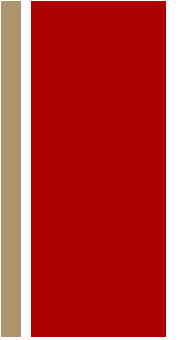
1. **Equitable use** | The design is useful and marketable to people with diverse abilities
2. **Flexibility in use** | The design accommodates a wide range of preferences and abilities.
3. **Simple and intuitive use** | Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.
4. **Perceptible information** | The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

# + Principles of UD – Cont'd

- 5. **Tolerance for error** | The design minimizes hazards and the adverse consequences of accidental or unintended actions.
- 6. **Low physical effort** | The design can be used efficiently and comfortable and with a minimum of fatigue.
- 7. **Size and space for approach and use** | Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.



How do we design to include these principles?



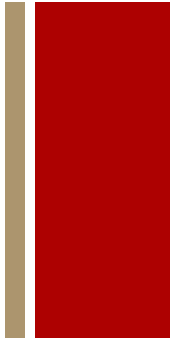


# An example of a Universally Designed entrance





# How do Universal Design principles relate to roadway and pedestrian features?

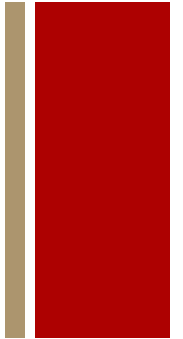


■ Such as:

- Sidewalks
- Driveway crossings
- Intersection crossings
- Bus stops
- Other pedestrian amenities



# Progressive examples of Sidewalk Design



- Sidewalk meeting minimum standards
- City standard sidewalk widths and buffer
- Higher level of accommodation



~4'

**Example 4' Wide Sidewalk "Congestion Issues"**

Source: Kimley Horn Associates





~4'



**Example 4' Wide Sidewalk "Congestion Issues"**

Source: Kimley Horn Associates





~8'

Increasing width to about 8' would alleviate **“congestion”** Source: Kimley Horn Associates



**Example City Standard Sidewalk**

Source: Community Design + Architecture





**Example City Standard Sidewalk**

Source: Community Design + Architecture





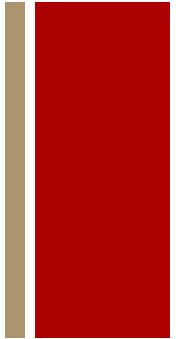


8'

12'



# Progressive examples of Driveway Design



- Examples of existing conditions that create challenging travel
- Higher level of accommodation



**Extreme slope and no connecting sidewalk**

Source: Tucson DOT





**Numerous driveways create challenging terrain**

Source: Tucson DOT



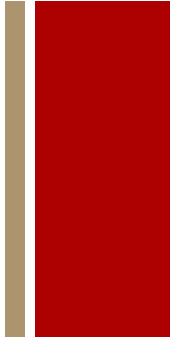


Smoother, more level curbs are easier to travel

Source: Tucson DOT



# Interactive Exercise/Discussion



- What do you think the user experiences are like in the following examples?
- In what ways is the design challenging?
- In what ways is it designed well?
- Other thoughts? Questions?









**Some median refuge, but level path of travel close to fast-moving traffic** Tucson DOT





**No protected median refuge**

Source: Tucson DOT





**Protected wide median refuge**

Source: Tucson DOT



**Marked crossing with guides @ HAWK**

Source: Tucson DOT





**PELICAN Median harbors all users**

Source: Kimley Horn Associates